

Appl. No. 10/079,134
Amd, Dated October 7, 2003
Reply to Office Action of August 8 2003

REMARKS/ARGUMENTS

With entry of this Amendment, claims 1, 4, 6-10 and 12-13 are pending in the above-captioned application. Claims 14-18 have been previously withdrawn as being drawn to non-elected subject matter. Claims 2, 3, 5 and 11 have been canceled herein without prejudice. Claims 1, 12 and 13 have been amended herein to specifically recite that the claimed invention involves a method of identifying a nucleotide in at least a first position in a target nucleic acid sequence using a 3'-terminal nucleotide labeled probe, by measuring a level of polarized fluorescence emitted from an extension reaction involving the probe, wherein a decreased level of polarized fluorescence indicates the presence of polymerase extension which indicates that the terminal nucleotide is complementary to the nucleotide in the first position thus enabling identification of the nucleotide in the first position. There is replete support throughout the application for the amendments to the claims made herein (*see, e.g.*, specification at page 6, lines 4-24, Examples at pages 15-18, and Figures 5A-6B), and thus no new matter is deemed to be introduced into the application by way of such amendments to the claims.

I. Claim Rejections – 35 U.S.C. Section 112

Claim 9 was objected to because the term "exonuclease" was misspelled. Appropriate correction has been made to claim 9 to correct such typographical error. Claim 4 was rejected as allegedly being indefinite under 35 U.S.C. Section 112 because the Examiner correctly indicated that DNA polymerase enzymes polymerize in the 5'-3' direction. Appropriate correction has been made to both claim 4 and to the specification to correct Applicant's inadvertent error in this regard.

II. Claim Rejections – 35 U.S.C. Sections 102 and 103

Claims 1-2, 4-9, and 12-13 were rejected under 35 U.S.C. Section 102(b) as allegedly being anticipated by Wallace et al. (U.S. Pat. 5,639,611). Claims 1-2, 4-9, and 12-13 were rejected under 35 U.S.C. Section 102(a) as allegedly being anticipated by See et al. (BioTechniques, Vol. 28, No. 4, pages 710-716, April 2000). Claims 1-2, 4, 6-9, and 13 were rejected under 35 U.S.C. Section 102(b) as allegedly being anticipated by Chen et al. (PNAS, Vol. 94, pages 10756-10761, September 1997) as evidenced by Newton et al. (Nucleic Acids

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Research, Vol. 17, no. 7, 2503-2515, 1989). Claim 3 was rejected under 35 U.S.C. Section 103(a) as allegedly being unpatentable over Wallace et al. or See et al. in view of Markiewicz et al. (Nucleic Acids Research, Vol. 25, No. 18, pages 3672-3680, 1997). Claim 10 was rejected under 35 U.S.C. Section 103(a) as allegedly being unpatentable over Wallace et al. or See et al. in view of Kumar et al. (U.S. Pat. 5,908,755).

In order to expedite prosecution of the instant claims to allowance, independent claims 1 and 13 have been amended herein to specifically recite that the claimed invention involves a method of identifying a nucleotide in at least a first position in a target nucleic acid sequence using a 3'-terminal nucleotide labeled probe, by measuring a level of polarized fluorescence emitted from an extension reaction involving the probe, wherein a decreased level of polarized fluorescence indicates the presence of polymerase extension which indicates that the terminal nucleotide is complementary to the nucleotide in the first position thus enabling identification of the nucleotide in the first position. As the Examiner indicated in her 8/08/03 Office Action at page 15, such a claimed method should now be free of the art. Thus, independent claims 1 and 13, as well as dependent claims 4, 6-10 and 12 which are dependent on allowable independent claim 1, should now be allowable and passed to issue.

Conclusion

For the foregoing reasons, Applicant believes all the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (650) 623-0667.

Respectfully submitted,



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